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A systematic review of the evidence for deprescribing interventions among older people living with frailty

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Abstract

Background: Older people living with frailty are often exposed to polypharmacy and potential harm from medications. Targeted deprescribing in this population represents an important component of optimizing medication. This systematic review aims to summarise the current evidence for deprescribing among older people living with frailty.

Methods: The literature was searched using Medline, Embase, CINAHL, PsycInfo, Web of Science, and the Cochrane library up to May 2020. Interventional studies with any design or setting were included if they reported deprescribing interventions among people aged 65+ who live with frailty identified using reliable measures. The primary outcome was safety of deprescribing; whereas secondary outcomes included clinical outcomes, medication-related outcomes, feasibility, acceptability and cost-related outcomes. Narrative synthesis was used to summarise findings and study quality was assessed using Joanna Briggs Institute checklists.

Results: Two thousand three hundred twenty-two articles were identified and six (two randomised controlled trials) were included with 657 participants in total (mean age range 79-87 years). Studies were heterogeneous in their designs, settings and outcomes. Deprescribing interventions were pharmacist-led (n = 3) or multidisciplinary team-led (n = 3). Frailty was identified using several measures and deprescribing was implemented using either explicit or implicit tools or both. Three studies reported safety outcomes and showed no significant changes in adverse events, hospitalisation or mortality rates. Three studies reported positive impact on clinical outcomes including depression, mental health status, function and frailty; with mixed findings on falls and cognition; and no significant impact on quality of life. All studies described medication-related outcomes and reported a reduction in potentially inappropriate medications and total number of medications per-patient. Feasibility of deprescribing was reported in four studies which showed that 72-91% of recommendations made were implemented. Two studies evaluated and reported the acceptability of their interventions and further two described cost saving.

Conclusion: There is a paucity of research about the impact of deprescribing in older people living with frailty. However, included studies suggest that deprescribing could be safe, feasible, well tolerated and can lead to important benefits. Research should now focus on understanding the impact of deprescribing on frailty status in high risk populations.

Trial registration: The review was registered on the international prospective register of systematic reviews (PROSPERO) ID number: CRD42019153367 .

Keywords: Deprescribing; Frailty; Inappropriate medications; Medication review; Polypharmacy.

PubMed Disclaimer

Figures

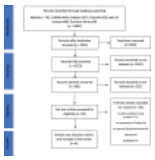

Fig. 1 PRISMA Flow Diagram of identification...

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